

Understanding Voluntary Disclosure: Malaysian Perspective

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ABSTRACT

This study investigates voluntary disclosure made by Malaysian firms. Unlike previous researches that identify the antecedents and/or consequences of disclosure, this study examines the disclosure in more detail, in terms of what items are disclosed as well as the trend of disclosure over the years of study. The main purpose of doing this is to better understand the disclosure behavior of firms. Better understanding of the firms' disclosure behavior can lead to a more appropriate research on disclosure especially on how to motivate firms to disclose more. Annual reports of 156 firms listed on main board of Bursa Malaysia from year 2006 to 2010 are analyzed. A checklist containing 49 items are used to measure the voluntary disclosure level of these firms. The score is given based on items disclosed in the annual report. Contradict to claim by previous studies that disclosure is a sticky policy, the results of this study show that there is an increasing pattern in disclosure level. In support of proprietary cost argument, the results show that information of strategic nature is disclosed less compared to financial information. This study differs from previous studies by focusing in detail on the items disclosed by firms instead of identifying factors or consequences of the disclosure. The trend of disclosure is determined by having a constant sample throughout the study period of five years. The results of this study raise several questions that can be a subject for future research.

Keywords: Disclosure; trend; Malaysia

INTRODUCTION

The issue on corporate disclosure has been brought to light following the failure of corporate giants such as Enron and WorldCom. Part of the blames was put on lack of transparency. The failure of these corporate giants was not only felt by the investors but also other stakeholders especially employees of the corporations. In order to prevent such failures in the future, investors and other stakeholders are pushing for more corporate disclosure. Since then, many studies have been carried out in the area of disclosure, mandatory as well as voluntary.

Studies have identified factors that may contribute to higher corporate disclosure by firms. Among the factors are corporate governance mechanism (Haniffa and Cooke 2002), culture (Ben Othman and Zéghal 2010), leverage (Eng and Mak 2003) and size (Ahmed and Courtis 1999). The benefits from higher disclosure especially to investors and the market is abundance. This includes reduction in information asymmetry (Frankel and Li 2004) that in return encourages investors to take part in capital market. A more active capital market will result in lower cost of transaction and this in return will induce investors to settle for lower return. Returns to investors are cost of capital to firms. In other word, not only market will benefit, in terms of availability of funds, but the firms itself, in terms of ability to raise capital at a lower cost (e.g. Embong et al. 2012). However, disclosure is not without costs and this explains the firms' hesitance to disclose more of their private information. Among the deterring costs is proprietary cost (Hayes and Lundholm 1996), that is, the

information disclosed may be used by competitors to the detriment of disclosing firms. This is particularly true in industry with low barrier of entry (Depoers 2000). It is therefore logical for firms to set their disclosure policy so that benefits gained from disclosure, especially voluntary disclosure outweigh the costs of disclosure.

Studies in the area of information economics have highlighted the needs for higher disclosure and transparency. The literature on market for lemon by Akerlof (1970) demonstrated that market could fail from information asymmetry problem. Information asymmetry exists when one party possesses more information than the other party. This may then leads to the party having more information acting opportunistically, sometimes to the disadvantage of those without the same information. Existence of information asymmetry may lead to two problems, adverse selection and moral hazard (Akerlof 1970; Spence 1973; Stiglitz 1975) that may impede the development of capital market. One of the ways to reduce information asymmetry as identified by previous studies such as Greenstein and Sami (1994) and Lim et al. (2003) is through disclosure of private information. Hence, studies such as Ahmed and Courtis (1999) and Iatridis (2006) have been conducted to identify factors that can increase disclosure. Findings from these studies suggest that disclosure level could be increased by manipulating these factors. Some factors such as corporate governance mechanism can be regulated, however, others such as culture and size is not easily manipulated or regulated by authorities. Firms therefore need to be encouraged to

disclose their private information voluntarily. Firms may be more motivated to disclose more if the benefits gained from such disclosure is significant. Hence studies have been conducted to highlight the benefits of higher disclosure.

Among the benefits of higher disclosure identified by previous studies are lower cost of capital (Botosan 1997; Embong et al. 2012), lower cost of debt (Mazumdar and Sengupta 2005) and better reputation (Luo et al. 2006). Cost of capital for example is important to firms as this is one of the factors considered in the evaluation of project or investment (Beneda 2003). Botosan (1997) found negative relationship between cost of capital and disclosure. This negative relationship is however found to be significant only for large firms by Embong et al. (2012). Small firms on the other hand experienced higher cost of equity with more disclosure, although the relationship was found not to be significant. This suggests that a lot more need to be learned about corporate disclosure, especially on voluntary items.

Despite findings that show the significance of disclosure, little attention however is given to the disclosure per se. Botosan (2006) stated that there are still a lot to learn about disclosure. Coles (2008) in commenting of the discussion on disclosure policy questions the validity of regression results of relevant studies due to large variations from one study to another. Unlike previous studies that relate disclosure to antecedents or consequences of disclosure, this study takes a step back by analyzing the disclosure itself. Items or information disclosed by firms are examined, and the level or trend of disclosure determined. Policy on disclosure is alleged to be sticky, that is rarely changes from year to year. This however has yet to be proven empirically. Therefore the main objective of this study is to examine the information disclosed by firms as well as determining the trend or pattern of voluntary disclosure over the studied period. The level of voluntary disclosure is scored based on checklist used by Mohd Ghazali and Weetman (2006). The results are expected to benefit not only the users of corporate reports but also the researchers. The intentions and behaviors of firms can be better understood by looking at what is disclosed by them. Some information disclosed by firms does not add value to users but some are valuable especially for decision-making purposes. Having known what information is being disclosed by firms will enable investors as well as regulators in pushing the firms for information that is of value to be disclosed more.

This paper is structured as follows. Discussion on literature relating to disclosure, especially how it is measured follows. Methodology that covers the sample and variables is discussed next followed by the analysis and results. The paper concludes with discussion on the results and suggestions for future research.

LITERATURE REVIEW

Corporate disclosure can be defined as a process of providing corporate information to users outside the

organization. Some of the items or information disclosed such as financial statements together with the notes to accounts are mandatory. The disclosure of such items is subjected to standards set by the accounting bodies. Other information such as chairman's statement, review of operation and information on workforce are provided on voluntary basis. Because the disclosure of these items is not mandatory, the level of disclosure of such items varies quite significantly from firms to firms. Some of the information disclosed adds value to users of the information. The usefulness of such information has been studied previously. Botosan (1997) for example shows that voluntary disclosure is associated with cost of equity capital. A more specific disclosure item such as corporate social reporting combined with business strategy are also shown to be related to profitability (Hardjono and Marrewijk 2001).

Studies on disclosure vary in terms of focus as well as measurement used. As discussed earlier, most studies focus on identifying factors that influence disclosure (e.g. Haniffa and Cook 2002) as well as the consequences of disclosure (e.g. Healy and Palepu 2001). Types of disclosure that are being studied also vary, from voluntary disclosure (e.g. Botosan 1997) to mandatory disclosure (e.g. Baber and Gore 2008). Studies on voluntary disclosure can further be grouped into either disclosure on specific items such as corporate social responsibility, CSR (e.g. Abdifatah 2013) or overall disclosure (Mohd Ghazali and Weetman 2006). The measurement of disclosure hence depends on the types of disclosure studied. Specific disclosure such as CSR measures disclosure level based on checklist established in this area such as the one used by Deegan (1996) and Gray et al. (1995). Voluntary disclosure is an interesting topic because although the information is disclosed voluntarily, the firm still need to set a policy of what to be disclosed and how much to disclose. This is because firms need to balance between the costs and benefits of disclosing the information. The most permanent and credible form of disclosing these information is through annual reports (Botosan 1997). Most studies on disclosure therefore use annual reports in measuring the extent (e.g. Botosan 1997) as well as the quality (e.g. Beattie et al. 2004) of disclosure.

Determining the level of overall voluntary disclosure is more challenging compared to specific disclosure such as CSR. There are generally two ways of measuring the level of voluntary disclosure. One is by relying on agencies that provide ranking or scores of disclosure, such as Association for Investment Management and Research (AIMR) and Credit Lyonnais Asia (CLSA). However, the coverage of firms included in their ranking is not comprehensive. Therefore, previous researches in the area of voluntary disclosure normally resort to self-constructed checklist. Francis et al. (2008) are in favor of using self-constructed checklist in gauging the level of disclosure. Among the reasons is that more firms can be included in the analysis and the scoring will be more consistent as researchers can take proper measure to ensure consistency.

Among the commonly used checklists are the one constructed by Botosan (1997) and Meek et al. (1995). These two checklists are either adopted or adapted by studies that measure disclosure level as part of the tested variables. Among recent studies that adopted Botosan's (1997) checklist are Elsayed and Hoque (2010) that investigates the relationship between international environmental factors and voluntary disclosure practices. The checklist constructed by Meek et al. (1995) is still being used recently, for example by Adelopo (2011) that investigates the voluntary disclosure practices in Nigeria. Chau and Gray (2010) also employ Meek et al.'s (1995) checklist in investigating the relationship between family ownership and board independence and voluntary disclosure in Hong Kong. Eng and Mak (2003) study the relationship between corporate governance and voluntary disclosure in Singapore using a more detail adaptation of checklist constructed by Meek et al. (1995). Similar checklist is used by Eng and Teo (1999) in investigating the relationship between disclosure and analysts forecasts in Singapore. Another adaptation of Meek et al. (1995) that has been customized to local environment is the one that is used by Mohd Ghazali and Weetman (2006). The checklist is adapted taking into consideration the local practice and requirement in Malaysia.

The checklists by Botosan (1997), Meek et al. (1995), Eng and Mak (2003) and Mohd Ghazali and Weetman (2006) are the most frequently used in the overall voluntary disclosure studies. These checklists (included in the appendices) are examined and compared to further understand the items that are normally disclosed by firms voluntarily. Except for the one constructed by Botosan (1997), the other three have several similarities. The reason being that the checklist used by Eng and Mak (2003) and Mohd Ghazali and Weetman (2006) are adapted from Meek et al. (1995). Table 1 presents the summary of items and classifications included in these checklists.

The study by Botosan (1997) that investigates the relationship between disclosure and cost of equity included only manufacturing firms in the sample. Therefore, it can be seen from the checklist (Appendix A) that the items included are specifically tailored to manufacturing firms. The score given is weighted with quantitative disclosure given higher score than qualitative one. A more detail look at the checklist shows that many items are grouped into one category although the nature is quite different. For example, items on strategy, competitive environment and information about product are put together under background information. Under key non-financial statistics category, items regarding employee and details on order and sales are combined together. Furthermore, there is no further classification on the nature of the items disclosed, that is whether the item is of strategic, financial or non-financial in nature. For these reasons, it will be difficult to analyze the type of items disclosed by the firms. Checklist constructed by Meek et al. (1995) on the other hand, is deemed to be

more suitable in measuring disclosure level for firms in all industries. Table 1 compares the four discussed checklists.

The items included in the checklist of Meek et al. (1995), as shown in Appendix B is substantially more than Botosan's (1997) checklist, 85 compared to 63 total items. The items are however more appropriately grouped together. Instead of given more weight to quantitative disclosure, the checklist considers quantitative disclosure as a separate item. For example, under future prospect category, item 14 is qualitative forecast of sales while item 15 is quantitative forecast of sales. Same goes for forecast of profits. This explains the large number of total items included in the checklist. All in all, the items included in the checklist are comprehensive and applicable to all industries. However, for a different environment, such as firms in developing countries, most of the items included in this checklist may not be applicable. This is due to the fact that disclosure level and level of transparency in general is still low (Ball, Robin and Wu 2003). Because of this, researchers conducting similar studies in developing countries find it necessary to use Meek et al.'s checklist with some modifications.

The checklist used by Eng and Mak (2003) is an adaptation of Meek et al. (1995) with several items excluded to suit Singapore's environment. The categorization is slightly different where the financial review in the original checklist is divided into two categories namely performance indicators and financial ratios. The full checklist is given in Appendix C. Eng and Mak (2003) has also given more room for a more specific item to be inserted by firms by having a special category (e.g. other useful strategic information), without pre-specifying the item. From this modification to the original checklist, the categories are reduced to 10 and the total number of items is significantly reduced from 85 to only 54.

The checklist used by Mohd Ghazali and Weetman (2006) is another adaptation of Meek et al.'s checklist. The sample of the study consists of Malaysian firms. For this reason, the checklist is modified to take into consideration local requirements such as listing requirements by Bursa Malaysia. Local practices are also taken into consideration, such as the annual award given for best annual report by NACRA (National Annual Corporate Report Awards). Slight changes have also been made to categories, for example while still under the theme of social reporting, Mohd Ghazali and Weetman (2006) named it as social and environmental reporting (see Appendix D) as opposed to the original checklist with social policy and value added information category. The categories of corporate strategies and future prospects are omitted, but the items under these categories are included in the chairman's report category. Besides grouping the disclosed items into categories, the items are also classified as financial, non-financial or strategic information. The non-financial information is labelled as corporate social responsibility by Mohd Ghazali and Weetman (2006).

The four mentioned checklists illustrate that in looking at a firm's voluntary disclosure level, all aspects

TABLE 1. Comparison of Checklists on Voluntary Disclosure Items

	Botosan (1997)	Meek et al. (1995)	Eng & Mak (2003)	Mohd Ghazali & Weetman (2006)
No. of items	63	85	54	51
No. of categories	5	12	10	11
Categories (number of items):				
Background information	16			
Summary of historical results	5			
Key non-financial statistics	20			
Projected information	9			
Management discussions and analysis	13			
General corporate information		2	5	4
Corporate strategy		6	5	
Acquisitions and disposals		2		
Research and development		3		1
Future prospects		10	4	
Information about directors		4		
Employee information		15	4	10
Social policy and value added information		8		7
Segmental information		7		2
Financial review		18		
Foreign currency information		6	3	
Stock price information		4		
Other useful strategic information			3	
Other useful non-financial information			3	
Performance indicators			6	
Financial ratios			8	4
Other useful financial information			2	
Specific corporate information				4
Chairman's report				3
Review of operation				3
Product/service information				5
Market related information				8
Scoring	Weighted	Unweighted	Weighted	Unweighted
Further classification (items):	-			
Strategic		23	25	15
Financial		35	22	19
Corporate social responsibility				17
Non-financial information		27	7	

are taken into consideration, financial and non-financial information. Information on employee may be as important as information related to product or services offered by the firm. However, it can be presumed that firms may be more willing to disclose general information as compared to information on corporate strategy. It is also logical to expect firms to be more secretive about their research and development activities as compared to

information regarding employee. Information related to future prospects and research and development may be more relevant to potential investors. Therefore, firms with intention to expand are expected to disclose more of this information. These are however can only be speculated because there has yet a study that investigates into the nature of disclosure itself. This study therefore aims at providing detail description on disclosure, looking at the

items disclosed as well the pattern or trend of disclosure over the years.

METHODOLOGY

SAMPLE

Potential sample are all firms listed under Main Board of Bursa Malaysia. Selected firms are those which existed throughout 2006 to 2010 with on-line annual reports available. The original observation indicates 844 firms listed on the main board of Bursa Malaysia in 2010 and 2009, 634 in 2008, 636 in 2007 and 649 in 2006. For the purpose of this study, a firm needs to exist throughout the study period, so that trend of disclosure can be established. Due to this requirement, only a total of 156 firms are selected as the sample of this study. The list of firms included in the sample is given in Appendix E. These 156 firms are firms that exist throughout the study period with annual report available on the website of Bursa Malaysia. The firms included consist of firms in various industries and sizes as depicted in Table 2. The distribution of samples according to industry is also shown in Table 2. Firms from the industrial products, consumer products and trading services sectors made up the majority of the sample with 30%, 18% and 16.67% respectively.

TABLE 2. Distribution of Sample According to Industry

Industry	Number of firms	Percentage
Consumer Products	28	17.95
Finance	5	3.20
Hotels	1	0.64
Industrial Products	48	30.77
Infrastructure and construction	17	10.90
Plantation	9	5.77
Properties	17	10.90
Technology	6	3.85
Trading Services	25	16.03
TOTAL	156	100.00

The main objective of this study is to investigate the pattern or trend of voluntary disclosure throughout study period from 2006 to 2010. Therefore, it is pertinent to have a constant sample, that is, the same firms throughout study period. Due to this constraint, 156 firms are taken as sample, representing about 20% of total population. It can also be seen that although majority of the sample are in three industries, all industries are represented. Hence, the issue of homogeneity of sample is not a major concern. The descriptive statistics of the firms in study sample is presented in Table 3.

TABLE 3. Descriptive Statistics of Firms Included In the Sample

Year		N	Minimum (RM '000)	Maximum (RM '000)	Mean (RM '000)	Median (RM '000)	Std. Deviation (RM '000)
2006	TA	156	36,037	71,403,634	1,135,318	227,287	6,131,496
	Sales	156	5,796	4,571,860	310,450	151,754	638,741
	MktCap	156	13,750	9,602,675	337,638	102,5401	1,082,195
	BV	156	-1,578,759	11,165,369	336,358	95,794	1,120,596
2007	TA	156	34,937	77,752,230	1,417,225	254,678	7,122,031
	Sales	156	11	5,751,919	388,732	161,178	870,427
	MktCap	156	14,843	14,159,483	565,904	127,853	1,716,185
	BV	156	-74,379	9,921,873	377,022	106,370	1,064,146
2008	TA	156	28,174	82,583,124	1,543,895	281,111	7,598,627
	Sales	156	274	8,545,033	443,360	178,773	1,068,071
	MktCap	156	8,375	9,783,234	349,312	97,144	1,162,915
	BV	156	-17,155	7,169,577	400,293	129,933	977,579
2009	TA	156	30,753	89,545,884	1,661,930	287,565	8,332,252
	Sales	156	1,013	8,444,321	436,979	185,217	1,050,310
	MktCap	156	2,909	12,643,838	439,571	100,794	1,401,169
	BV	156	1,370	7,744,124	408,526	148,314	998,114
2010	TA	156	6,041	96,217,543	1,745,836	312,291	8,758,031
	Sales	156	4,882	13,442,917	508,193	187,749	1,457,8602
	MktCap	156	6,041	15,889,509	591,281	130,081	2,000,382
	BV	156	1,507	9,636,346	461,586	159,234	1,177,355

*TA is total assets, MktCap is market capitalization and BV is book value.

From the distribution of total assets, sales and market capitalization, it can be seen that the sample included varies in terms of size. In 2010 for example, total assets for the smallest firm is about RM6 million compared to the largest firm with RM96 billion. The average total assets for 2010 is about RM2 billion. Sales, market capitalization and book value are alternative measures of size. Investigation of the data indicates that the smallest firm in the sample (Haisan Resources Bhd) is classified as small by all measures of size used, except for sales. The variation in size is not a major concern since the firms included in the sample are the same firms throughout the period of study.

DISCLOSURE MEASUREMENT

The level of voluntary disclosure is assessed from annual report. Although there are many channels where firms can disseminate their private information to the public, such as the use of internet, annual report is still seen as the most credible and reliable channel of information (Schuster and O'Connell, 2006). Since the firms included in the sample are Malaysian firms, this study uses checklist adapted by Mohd Ghazali and Weetman (2006). A small modification is made to the original list where the segmental information is excluded from the checklist making the total items 49, instead of 51 with 10 categories instead of 11. The items that are omitted are disclosure on segmental information. This is done due to the fact that segmental information disclosure is made mandatory in 1987 by MASB 22 and reaffirmed by MFRS 8, effective January 1st 2012 (Tan 2001).

Based on the modified disclosure checklist, items that are being disclosed by firms are identified. Score of 1 is given to items disclosed and 0 for non-disclosure. The items are classified into ten categories namely general corporate information, specific corporate information, chairman's report, review of operations, product/service information, research and development, employee information, social and environmental reporting, financial ratios and market related information. These 49 items are also classified into three types of information namely strategic, financial and corporate social responsibility. Analyses on the disclosure based on the ten categories indicate the extensiveness of firms' voluntary disclosure. For example, the result indicate whether firms disclose more on its operation (review of operations, product/service information, segmental

information, research and development) or more on general information such as general corporate information, specific corporate information and employee information. Analysis on the three types of information gives indication as to which information firms are willing to disclose to the public. Results of the analyses are presented next.

RESULTS AND DISCUSSIONS

The data is analyzed using SPSS and graphs plotted using Excel. The analysis is done according to years so that the trend can also be examined. In order to calculate total disclosure level, scores obtained by firms are divided by the total items in the checklist. The descriptive statistic on total disclosure of the sample is presented in Table 4 below.

Minimum disclosure level is about 6.12% with maximum of 44.90% in 2006. There is a slight increase of voluntary disclosure from 2006 to 2010 with the minimum disclosure level increases to 10.20% and maximum disclosure level at 51.02%. A check through the data shows that the firm that disclose the least from 2006 to 2010, is the same firm A (name not disclosed). The highest disclosure also comes from the same firm, Z (name not disclosed) throughout the study period, with a total disclosure of 44.9% in 2006 to 51.02% in 2010. The close values of mean and median indicates the distribution of total disclosure level of sample to be almost normal. Looking at the trend of voluntary disclosure, it can be seen that the mean of total disclosure is increasing steadily from 19.56% in year 2006 to 25.44% in 2010. The contention that disclosure policy is a sticky policy therefore can be contested. The result also shows that the largest increase occurs from year 2006 to 2007. To further see whether the improvement in disclosure level is significant from year to year, t-test is performed. The result is presented in Table 5.

It can be seen that the increase in disclosure level is significant from year 2006 to 2007 at 0.01% significance level. From year 2007 to 2009, although the disclosure level increases, the difference is not significant. From 2009 to 2010, the disclosure level does not show any changes. The increase in disclosure level from 2006 to 2007 can be investigated further to identify possible causes of the increase. In 2006, Malaysia starts the convergence exercise to align the local accounting standards to the international standards, IFRS. One of the features of IFRS

TABLE 4. Descriptive Statistics on Total Disclosure Level

Year	N	Minimum	Maximum	Mean	Median	Std. Deviation
2006	156	0.0612	0.4490	0.1956	0.1837	0.0688
2007	156	0.0612	0.5102	0.2220	0.2041	0.0873
2008	156	0.0612	0.5918	0.2424	0.2245	0.0888
2009	156	0.0612	0.6122	0.2544	0.2551	0.0887
2010	156	0.1020	0.5102	0.2544	0.2449	0.0851

TABLE 5. Results of t-test analysis

Years of comparison	Means difference	t-value	Sig.
2006-2007	-0.0264	-2.9082	0.0020
2007-2008	-0.0204	-2.0068	0.9349
2008-2009	-0.0120	-1.1677	0.9482
2009-2010	0.0000	0.0000	0.6285

is that it requires more disclosure, especially regarding the reporting of items in the financial statements. The impact of this requirement may at the same time influence the disclosure of other information which is not made mandatory by regulations. This could be one of possible explanations for the substantial increase in disclosure level of Malaysian firms from 2006 to 2007.

The total disclosure level may not reveal overall picture of firms' disclosures. Further analyses are performed on the disclosure scores according to the categories as specified in the checklist. The checklist used in this study divided the 49 items into 10 categories. The categories are general corporate information (GCI), specific corporate information (SCI), chairman's report (CR), review of operations (RO), product/service information (PSI), research and development (RD), employee information (EI), social and environmental reporting (SER), financial ratios (FR) and market related information (MRI). Number of items in each category is not equal, as shown in Table 1. The percentage of disclosure for each category is calculated in the same manner as the calculation of total disclosure. The score of each firm is divided with total score applicable in each category. For example, there are 10 items in employee information category; the number of items disclosed by firms is divided by ten to get the disclosure score in that category. The means for disclosure level of each category is presented in Table 6.

The row labeled "study period" shows means of the sample throughout the study period, which is for the total 780 firm-year observations. It can be seen that the highest disclosure is under category chairman's report with 46.92%. Items included under this category are overview of economic performance, discussion on future industry trend and discussion on factors affecting firm's prospects. Several

firms with low scores of total voluntary disclosure are found to have no such information in the chairman's report. The least disclosed item is under the category of research and development. There is only one item included in this category. So, firms are either disclosing or not disclosing information regarding their research and development activities. For the whole study period, only 4.62% of firms disclose information on research and development activity. For this category, even firm with highest total disclosure score is not disclosing any information on research and development activities. An interesting pattern of voluntary disclosure can be seen from further investigation into individual firm. Figure 1 and 2 shows the trend of disclosure for two firms that are identified as having low and high disclosure level respectively.

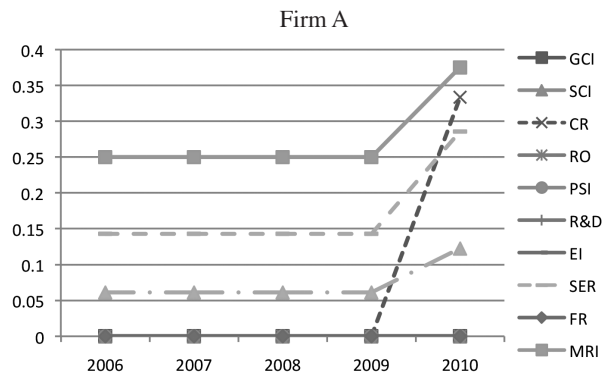
Firms A and B are the two firms with lowest score of total voluntary disclosure. Real name of the firms are not disclosed to avoid any negative perception towards these firms. It can be seen that for these two firms, the amount of information disclosed are almost constant throughout the study period, except in 2010 where there are drastic increase in almost all items. This again raises attention as to the possible cause of this increase. This however is beyond the scope of this study. Comparison is made to two firms with highest score of total voluntary disclosure as depicted in Figure 2.

Compared to the firms with low disclosure level, firms with high disclosure level show more variation in the amount of information disclosed by categories. Firm Y for example shows constant level of disclosure up to year 2008 when there is a decline in the amount of information on product and services as well as financial ratio disclosed. Total voluntary disclosure is however constant throughout the study period. Firm Z is identified as the one with

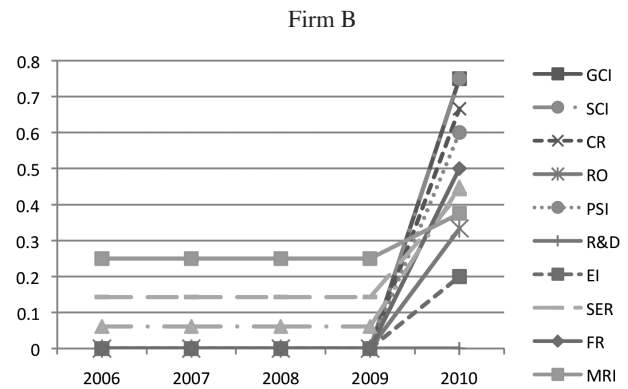
TABLE 6. Means of disclosure level by category

Year	GCI	SCI	CR	RO	PSI	RD	EI	SER	FR	MRI
2006	0.3654	0.1106	0.4423	0.1709	0.0462	0.0385	0.0141	0.1621	0.2885	0.3782
2007	0.3718	0.1074	0.4509	0.1880	0.0538	0.0321	0.0660	0.2381	0.2997	0.3878
2008	0.3942	0.1058	0.4744	0.1987	0.0564	0.0513	0.1083	0.2930	0.3189	0.3814
2009	0.4119	0.1218	0.4872	0.2030	0.0205	0.0577	0.1224	0.3095	0.3365	0.3814
2010	0.4295	0.1378	0.4915	0.1688	0.0885	0.0513	0.1256	0.3123	0.3077	0.3846
Study period	0.3946	0.1167	0.4692	0.1859	0.0531	0.0462	0.0873	0.2630	0.3103	0.3827

GCI = general corporate information, SCI = specific corporate information, CR = chairman's report, RO = review of operations, PSI = product/service information, RD = research and development, EI = employee information, SER = social and environmental reporting, FR = financial ratios and MRI = market related information.

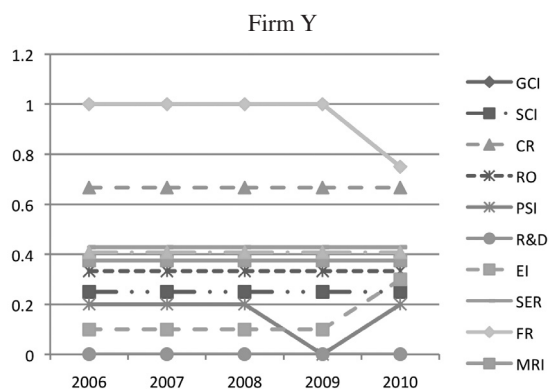


GCI = general corporate information, SCI = specific corporate information, CR = chairman's report, RO = review of operations, PSI = product/service information, RD = research and development, EI = employee information, SER = social and environmental reporting, FR = financial ratios and MRI = market related information (Note: Only MRI, CR, SCI and Total are with values. All other formed overlapping lines with value of 0)

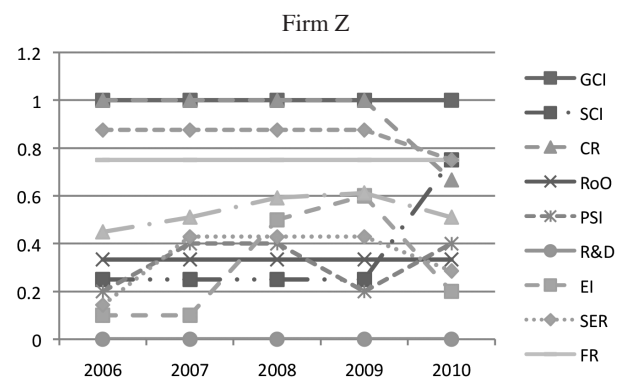


GCI = general corporate information, SCI = specific corporate information, CR = chairman's report, RO = review of operations, PSI = product/service information, RD = research and development, EI = employee information, SER = social and environmental reporting, FR = financial ratios and MRI = market related information.

FIGURE 1. Disclosure trend of firms identified as having low disclosure level



GCI = general corporate information, SCI = specific corporate information, CR = chairman's report, RO = review of operations, PSI = product/service information, RD = research and development, EI = employee information, SER = social and environmental reporting, FR = financial ratios and MRI = market related information.



GCI = general corporate information, SCI = specific corporate information, CR = chairman's report, RO = review of operations, PSI = product/service information, RD = research and development, EI = employee information, SER = social and environmental reporting, FR = financial ratios and MRI = market related information.

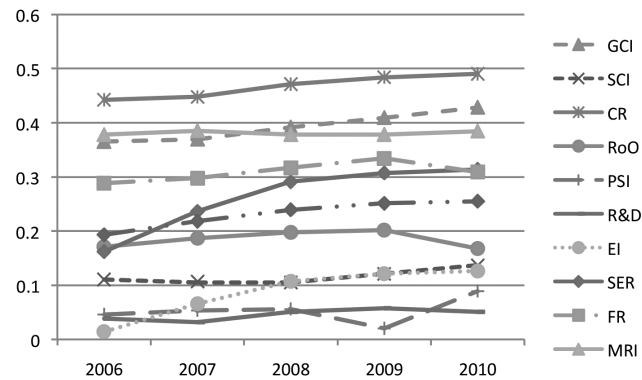
FIGURE 2. Disclosure trend of firms identified as having high disclosure level

highest disclosure level. Graphical representation of disclosure level of firm Z as shown in Figure 2 shows a more interesting pattern. Total disclosure level steadily increases from 2006 to 2009 before a decline in 2010. This trend is contributed by an increasing disclosure of items classified as employee information, product and services information as well as social and environmental reporting. The decline of total disclosure in 2009 is contributed by lower disclosure of information on employee information, social and environmental reporting, chairman's report and market related information despite the increasing disclosure of information in the categories of product and services as well as specific corporate information. Closer look at the disclosure pattern of these four firms reveals that more

studies are required in order to understand the disclosure behavior of firms, as suggested by Botosan (2006).

Analysis on the disclosure levels for all firms in the sample by categories throughout the study period show an increasing trend. This can be clearly seen from the graphical representation as shown in Figure 3.

It can be seen that total voluntary disclosure increases steadily from year 2006 to 2010. Almost all categories show an increasing trend except for financial ratio and review of operation that show a decline in 2010. This indicates that in general, there is an increasing trend of voluntary disclosure for the sample of this study. The increase in disclosure for all categories is gradual except for social and environmental reporting which shows quite



GCI = general corporate information, SCI = specific corporate information, CR = chairman's report, RO = review of operations, PSI = product/service information, RD = research and development, EI = employee information, SER = social and environmental reporting, FR = financial ratios and MRI = market related information.

FIGURE 3. Disclosure trend by categories

a drastic increase from year 2006 to 2008. Future study can look into the possible cause of this drastic change.

Types and nature of information disclosed by firms can give general indication of the intention of disclosing firms. As illustrated in Figure 3, the three mostly disclosed items are chairman's report, general corporate information and market related information. Among items included under the chairman's report category are disclosures regarding future prospect and firm's strategy. This indicates that one of the intentions may be to attract investors through disclosure of such information. This contention of investors' focused disclosure is strengthened by the high disclosure on market related information. In an attempt to attract investors, firms however need to also consider the cost attached to disclosure. As discussed earlier, proprietary cost can be a significant factor deterring firms from disclosing corporate information. It is therefore logical to assume that firms will disclose less of information relating to strategic matters.

The checklist used in this study further classifies the disclosed items under three categories, namely strategic (S), financial (F) and corporate social responsibility (CSR). Analysis of disclosure level on this sub-categorization is performed and the result is presented in Table 7, with graphical representation in Figure 4.

The results depicted in Table 7 and Figure 4 lends support to proprietary cost reasoning for firms not to disclose their information. It can be seen that information of strategic nature is disclosed much less than financial information. Firms are more willing to disclose financial information such as profitability and gearing ratios because this information is important to investors and at the same time these financial ratios can be calculated from financial statements. Therefore, it makes sense that they make it easier for the investors by disclosing the ratios voluntarily in the annual report. Disclosing information of strategic nature may subject the firms to proprietary cost, that is,

TABLE 7. Disclosure Level by Sub-Categorization

Year		N	Minimum	Maximum	Mean	Std. Deviation
2006	Strategic	156	0.0000	0.4667	0.1804	0.0994
	Financial	156	0.1176	0.7647	0.3290	0.1262
	CSR	156	0.0588	0.3529	0.0757	0.0484
2007	Strategic	156	0.0000	0.5333	0.1831	0.1043
	Financial	156	0.1176	0.8235	0.3420	0.1319
	CSR	156	0.0588	0.4118	0.1365	0.1039
2008	Strategic	156	0.0000	0.5333	0.1893	0.1048
	Financial	156	0.1176	0.8824	0.3490	0.1296
	CSR	156	0.0588	0.4706	0.1827	0.1049
2009	Strategic	156	0.0000	0.5333	0.2022	0.1104
	Financial	156	0.1176	0.8824	0.3565	0.1304
	CSR	156	0.0588	0.5294	0.1984	0.1046
2010	Strategic	156	0.0000	0.6000	0.2098	0.1165
	Financial	156	0.1765	0.8235	0.3471	0.1170
	CSR	156	0.0588	0.6471	0.2012	0.1108

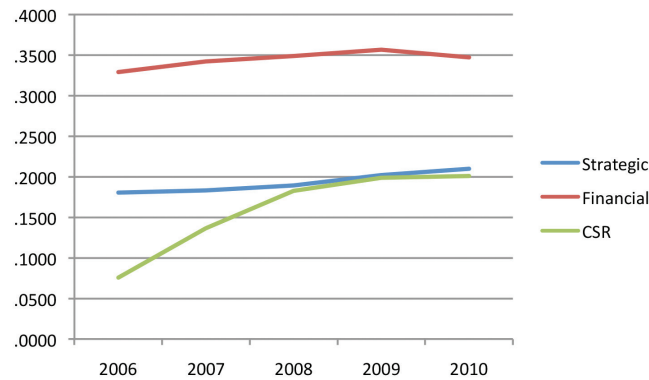


FIGURE 4. Disclosure trend by sub-classification

possibility of competitors taking advantage from the disclosed information. This may explain the low level of disclosure for such items. Future research may investigate whether the disclosure on strategic information is related to the proprietary cost.

The trend of disclosure on CSR related information shows an interesting pattern. There is a substantial increase of this disclosure from year 2006 to 2008 and increase marginally from then. Again, this can be another area that can be pursued by future research. The results from this simple study open up opportunity for further research into this matter. As Botosan (2006) mentioned, there is a lot more to learn about corporate disclosure.

CONCLUSION

The purpose of this study is to provide an insight into voluntary disclosure of firms in Malaysia. Analysis on the level of disclosure is performed on the sample to gauge the level of not only total voluntary disclosure but also disclosure level by categories. Results indicate that there is a steady increase in disclosure level among firms in Malaysia. Further analysis on sub-categorization of financial, strategic and corporate social responsibility information seems to support proprietary cost argument. Results indicate that the least information disclosed is that of strategic information. Analysis on individual firms in the sample reveals an interesting pattern. The type of information and how much is being disclosed vary quite significantly from year to year especially for larger firms. The results challenge the contention that disclosure policy is rigid or sticky, as claimed by previous studies such as Botosan (1997). In conclusion, results of this study raise several questions that presents as opportunities for future research. A change in disclosure level for example can be mapped against significant event in the market or at firm's level. Could for example, the drastic increase in CSR be mapped against the listing requirements set by Bursa Malaysia on CSR disclosure (Part A, Para 29) that is made effective in December 2007. Finding possible reasons behind disclosure of certain information may help us understand the disclosure behavior of firms better.

By understanding the behavior, measures to increase the level of corporate transparency can then be formulated. The subject of corporate disclosure can be studied from behavioral perspective. Organizations or relevant people in the organizations must have set the policy for a reason, including disclosure policy. By studying the trend and the nature of the disclosure, the behavior can be better understood. This then hopefully will initiate more research into this area, looking at the subject from different perspective.

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APPENDICES

Appendix A : Disclosure checklist
Botosan (1997)

Company Name:		
Report Type: Annual report		
Year end:		
1. BACKGROUND INFORMATION	Qualitative	Quantitative
a. A statement of corporate goals or objectives is provided		
b. A general statement of corporate strategy is provided		
c. Actions taken during the year to achieve the corporate goal is discussed.		
d. Planned actions to be taken in future years are discussed.		
e. A time frame for achieving corporate goals is provided.		
f. Barriers to entry are discussed.		
g. Impact of barriers to entry on current profits is discussed.		
h. Impact of barriers to entry on future profits is discussed.		
i. The competitive environment is discussed.		
j. The impact of competition on current profits is discussed.		
k. The impact of competition on future profits is discussed.		
l. A general description of the business is provided.		
m. The principal products produced are identified.		
n. Specific characteristics of these products are described.		
o. The principal markets are identified.		
p. Specific characteristics of these markets are described.		
TOTAL		

2. SUMMARY OF HISTORICAL RESULTS	10 or more years	Fewer than 10 years
a. Return-on-assets or sufficient information to compute return-on-assets (i.e. net income, tax rate, interest expense and total assets is provided.		
b. Net profit margin or sufficient information to compute net profit margin (i.e. net income, tax rate, interest expense and sales is s provided,		
c. Asset turnover or sufficient information to compute asset turnover (i.e. sales and total assets) is provided.		
d. Return-on-equity or sufficient information to compute return-on-equity (i.e. net income and stockholders equity) is provided.		
	Yes	No
e. A summary of sales and net income for at least the most recent eight quarters is provided.		
TOTAL		

3. KEY NON-FINANCIAL STATISTICS	Amount	
a. Number of employees,		
b. Average compensation per employee.		
c. Order backlog .		
d. Percentage of order backlog to be shipped next ear.		
e. Percentage of sales in products designed in the last five years.		
f. Market share.		
g. Dollar amount of new orders laced this ear.		
h. Units sold.		
i. Unit selling rice.		

j.	Growth in units sold.		
k.	Rejection/defect rates.		
l.	Production lead time.		
m.	Age of key employees.		
n.	Sales growth in key regions not reported as geographic segments.		
o.	Break-even sales \$'s		
p.	Volume of materials consumed		
q.	Prices of materials consumed		
r.	Ratio of inputs to outputs		
s.	Average age of key employees		
t.	growth in sales of key products not reported as product segments		
TOTAL			

4. PROJECTED INFORMATION		Pos., Neg. Or Neutral	Qual. or Quan.	
a.	A comparison of previous earnings projections to actual earnings is provided.			
b.	A comparison of previous sales projections to actual sales is provided.			
c.	The impact of opportunities available to the firm on future sales or profits is discussed.			
d.	The impact of risks facing the firm on future sales or profits is discussed.			
e.	A forecast of market share is provided.			
f.	A cash flow projection is provided.			
g.	A projection of capital expenditures or R&D is provided.			
TOTAL				
		Pos., Neg. Or Neutral	Qual. or Quan.	Wgt.
h.	A projection of future profits is provided.			
i.	A projection of future sales is provided.			
TOTAL				
5. MANAGEMENT DISCUSSION AND ANALYSIS (explanations for changes must be providedz)		Qual or Quan	Prod seg.	Tot. firm
a.	Change in sales.			
b.	Change in opening income,			
TOTAL				
		Qual. or Quan	Total firm	
5. MANAGEMENT DISCUSSION AND ANALYSIS (explanations for changes must be providedz)				
c.	Change in cost of goods sold.			
d.	Change in cost of goods sold as a percentage of sales.			
e.	Change in gross profit.			
f.	Change in gross profit as a percentage of sales.			
g.	Change in selling and administrative expenses.			
h.	Change in interest or interest income.			
i.	Change in net income.			
j.	Change in inventory.			
k.	Change in accounts receivable.			
l.	Change in capital expenditures or R&D.			
m.	Change in market share.			
TOTAL				

Appendix B: Disclosure checklist
Meek, Roberts and Gray (1995)

Strategic information

I) General Corporate Information

1. Brief history of company
2. Organizational structure

II) Corporate Strategy

3. Statement of strategy and objectives - general
4. Statement of strategy and objectives - financial
5. Statement of strategy and objectives - marketing
6. Statement of strategy and objectives - social
7. Impact of strategy on current results
8. Impact of strategy on future results

III) Acquisitions and Disposals

9. Reasons for the acquisitions
10. Reasons for the disposals

IV) Research and Development

11. Corporate policy on research and development
12. Location of research and development activities
13. Number employed in research and development

V) Future Prospects

14. Qualitative forecast of sales
15. Quantitative forecast of sales
16. Qualitative forecast of profits
17. Quantitative forecast of profits
18. Qualitative forecast of cash flows
19. Quantitative forecast of cash flows
20. Assumptions underlying the forecasts
21. Current period trading results - qualitative
22. Current period trading results - quantitative
23. Order book or backlog information

Nonfinancial information

VI) Information About Directors

24. Age of the directors
25. Educational qualifications (academic and professional)
26. Commercial experience of the executive directors
27. Other directorships held by executive directors

VII) Employee Information

28. Geographical distribution of employees
29. Line-of-business distribution of employees
30. Categories of employees by gender
31. Identification of senior management and their functions
32. Number of employees for two or more years
33. Reasons for changes in employee numbers or categories
34. Amount spent on training
35. Nature of training
36. Categories of employees trained
37. Number of employees trained
38. Data on accidents
39. Cost of safety measures

- 40. Redundancy information (general)
- 41. Equal opportunity policy statement
- 42. Recruitment problems and related policy

VIII) Social Policy and Value Added Information

- 43. Safety of products (general)
- 44. Environmental protection programs - quantitative
- 45. Charitable donations (amount)
- 46. Community programs (general)
- 47. Value added statement
- 48. Value added data
- 49. Value added ratios
- 50. Qualitative value added information

Financial information

IX) Segmental Information

- 51. Geographical capital expenditure - quantitative
- 52. Geographical production - quantitative
- 53. Line-of-business production - quantitative
- 54. Competitor analysis - qualitative
- 55. Competitor analysis - quantitative
- 56. Market share analysis - qualitative
- 57. Market share analysis - quantitative

X) Financial Review

- 58. Profitability ratios
- 59. Cash flow ratios
- 60. Liquidity ratios
- 61. Gearing ratios
- 62. Disclosure of intangible valuations (except goodwill and brands)
- 63. Dividend payout policy
- 64. Financial history or summary - six or more years
- 65. Restatement of financial information to non-U.S./U.K. GAAP
- 66. Off balance sheet financing information
- 67. Advertising information - qualitative
- 68. Advertising expenditure - quantitative
- 69. Effects of inflation on future operations - qualitative
- 70. Effects of inflation on results - qualitative
- 71. Effects of inflation on results - quantitative
- 72. Effects of inflation on assets - qualitative
- 73. Effects of inflation on assets - quantitative
- 74. Effects of interest rates on results
- 75. Effects of interest rates on future operations

XI) Foreign Currency Information

- 76. Effects of foreign currency fluctuations on future operations - qualitative
- 77. Effects of foreign currency fluctuations on current results - qualitative
- 78. Major exchange rates used in the accounts
- 79. Long-term debt by currency
- 80. Short-term debt by currency
- 81. Foreign currency exposure management description

XII) Stock Price Information

- 82. Market capitalization at year end
- 83. Market capitalization trend
- 84. Size of shareholdings
- 85. Type of shareholder

Appendix C: Disclosure index
Eng and Mak (2003)

(S) Strategic information

(S-1) General corporate information: Score

Brief history of company	1
Organizational structure/chart	1
General description of business/activities	1
Principal products	1
Principal markets	1

(S-2) Corporate strategy: Score

Statement of corporate goals or objectives	1
Current strategy	
1 2 3	
Impact of strategy on current results	1 2 3
Future strategy	
1 2 3	
Impact of strategy on future results	1 2 3

(S-3) Management discussion and analysis: Score

Review of operations	1 2 3
Competitive environment	1 2 3
Significant events of the year	1 2 3
Change in sales/profits	1 2
Change in cost of goods sold	1 2
Change in expenses	1 2
Change in inventory level	1 2
Change in market share	1 2

(S-4) Future prospects: Score

New developments	1 3 5
Forecast of sales/profit	1 2
Assumptions underlying the forecast	1 2
Order book or backlog information	1

(S-5) Other useful strategic information: Score

_____	1 2 3
_____	1 2 3
_____	1 2 3

(N) Non-financial information

(N-1) Employee information: Score

Number of employees	1
Compensation per employee	2
Value-added per employee	2
Productivity indicator	2

(N-2) Other useful non-financial disclosure: Score	
_____	1 2 3
_____	1 2 3
_____	1 2 3
(F) Financial information	
(F-1) Performance indicators (not from financial statements): Score	
Historical figures for last five years or more 5(or as long as company's formation)	
Turnover	1
Profit	1
Shareholders' _ funds	1
Total assets	1
Earnings per share	1
(F-2) Financial ratios: Score	
Return on shareholders' funds (ROE)	1
Return on assets	1
Gearing ratio	1
Liquidity ratio	1
Other useful ratios (·1):	1
_____	1
_____	1
_____	1
(F-3) Projected information: Score	
Cash flow forecast	3
Capital expenditures and/or R&D expenditures forecast	3
Earnings forecast	3
(F-4) Foreign currency information: Score	
Impact of foreign exchange fluctuations on current results	1 2 3
Foreign currency exposure management description	1 2 3
Major exchange rates used in the accounts	1
(F-5) Other useful financial information: Score	
_____	1 2 3

Appendix D: Disclosure checklist
Mohd Ghazali and Weetman (2006)

			Type	Score
(A)	General corporate information			
	1	Brief history of company/company profile	S	
	2	Corporate vision and mission	S	
	3	Corporate structure	S	
	4	5 year financial highlights	F	
(B)	Specific corporate information			
	5	Statement of strategy/objectives	S	
	6	Significant events calendar	S	
	7	Acquisition and expansion	S	
	8	Disposals and cessation	S	
(C)	Chairman's report			
	9	Overview of economic performance	F	
	10	General discussion of future industry trend	S	
	11	Discussion of factors affecting company's prospects	S	
(D)	Review of operations			
	12	Review of operations by divisions - turnover	F	
	13	Review of operations by divisions - operating profit	F	
	14	Review of operations - productivity	F	
(E)	Product/service information			
	15	Discussion of major types of products/services/projects	S	
	16	Improvement in product quality	S	
	17	Improvement in customer service	S	
	18	Distribution of marketing network for finished products	S	
	19	Customer awards/ratings received	S	
(F)	Segmental information			
	20	Geographical production	F	
	21	Line of business production	F	
(G)	Research and development			
	22	Discussion of company's R & D activities	S	
(H)	Employee information			
	23	Breakdown of employees by line of business	CSR	
	24	Breakdown of employees by level of qualification/exec vs. non-execs	CSR	
	25	Breakdown of employees by ethnic origin	CSR	
	26	Employees appreciation	CSR	
	27	Employees training	CSR	
	28	Amount spent on training	CSR	

	29	Number of employees trained	CSR	
	30	Discussion of employee welfare	CSR	
	31	Safety policy	CSR	
	32	Information on accidents	CSR	
(I)	Social and environmental reporting			
	33	Statement of internal control	CSR	
	34	Value added statement	CSR	
	35	Product safety	CSR	
	36	Environmental policies	CSR	
	37	Charitable donations/sponsorships	CSR	
	38	Participation in government social campaigns	CSR	
	39	Community programs (health education)	CSR	
(J)	Financial ratios			
	40	Profitability ratios	F	
	41	Gearing ratios	F	
	42	Liquidity ratios	F	
	43	NTA per share	F	
(K)	Market related information			
	44	Stock Exchanges where shares are traded	F	
	45	Volume of shares traded (trend)	F	
	46	Volume of shares traded (year-end)	F	
	47	Share price information (trend)	F	
	48	Share price information (year-end)	F	
	49	Market capitalization (year-end)	F	
	50	Domestic and foreign shareholdings	F	
	51	Distribution of shareholdings (type)	F	

S *Strategic*
F *Financial*
CSR *Corporate social responsibility*

Appendix E: List of firms in the sample

Company			
1	ADVENTA BHD	39	DOMINANT ENTERPRISE BERHAD
2	AHMAD ZAKI RESOURCES BERHAD	40	EASTERN & ORIENTAL BHD
3	AJIYA BERHAD	41	ECOFIRST CONSOLIDATED BERHAD
4	ALAM MARITIME RESOURCES BHD	42	EKOVEST BERHAD
5	AMALGAMATED INDUSTRIAL STEEL BHD	43	EMICO HOLDINGS BHD
6	AMMB HOLDINGS BHD	44	EMIVEST BHD
7	ANALABS RESOURCES BHD	45	ENCORP BHD
8	ANN JOO RESOURCES BHD	46	ENG KAH CORPORATION BHD
9	APB RESOURCES BHD	47	EVERGREEN FIREBOARD BERHAD
10	ATURMAJU RESRCS BHD	48	FARM'S BEST BHD
11	AWC BHD	49	FRONTKEN CORP BHD
12	BERJAYA ASSETS BHD	50	FURNIWEB INDUSTRIAL PRODUCTS BHD
13	BONIA CORPORATION BHD	51	GADANG HOLDINGS BERHAD
14	BOUSTEAD HEAVY INDUSTRIES CORP BHD	52	GEORGE KENT (M) BHD
15	BOX PAK (M) BHD	53	GE-SHEN CORP BHD
16	BREM HOLDING BERHAD	54	GHL SYSTEM BHD
17	BSL CORP BHD	55	GLOBETRONICS TECHNOLOGY BHD
18	CAB CAKARAN CORP BHD	56	GOLDEN FRONTIER BHD
19	CB INDUSTRIAL PRODUCT HOLDING BHD	57	GOPENG BHD
20	CBSA BHD	58	GUNUNG CAPITAL BHD
21	CCK CONSOLIDATED HOLDINGS BHD	59	HAISAN RESOURCES BHD
22	CENTURY BOND BHD	60	HIL INDUSTRIES BHD
23	CHEE WAH CORPORATION BHD	61	HOCK SENG LEE BERHAD
24	CHIN TECK PLANTATION BHD	62	HONG LEONG FINANCIAL GROUP
25	CHIN WELL HOLDINGS BHD	63	HUBLINE BHD
26	CLASSIC SCENIC BHD	64	HWANG DBS
27	CME GROUP BHD	65	HYTEX INTEGRATED BHD
28	COASTAL CONTRACT BHD	66	INDUSTRONICS BHD
29	COCOALAND HOLDINGS BHD	67	IQ GROUP HOLDINGS BHD
30	COMINTEL CORP BHD	68	JAYCORP BHD
31	COMPUGATES HOLDINGS BHD	69	K&N KENANGA HOLDINGS BHD
32	COMPUTER FORMS BHD	70	KARAMBUNAI CORP BHD
33	COUNTRY HEIGHTS HOLDINGS BHD	71	KAWAN FOOD BHD
34	D&O GREEN TECHNOLOGY BHD	72	KBB RESOURCES BHD
35	DAIBOCHI PLASTIC AND PACKAGING INDUSTRY BHD	73	KEN HOLDINGS BHD
36	DENKO INDUSTRIAL CORP	74	KESM INDUSTRIES BHD
37	DIJAYA CORP BHD	75	KHEE SAN BHD
38	DKLS INDUSTRIES	76	KHIND HOLDINGS BHD
77	KIM HIN INDUSTRY BERHAD	117	PRESS METAL BHD
78	KLUANG RUBBER COMPANY BHD	118	PRESTAR RESOURCES BHD
79	KNUSFORD BHD	119	PRICEWORTH INTERNATIONAL
80	KOBAY TECHNOLOGY BHD	120	PRINSIPTEK CORP BHD
81	LAFARGE MALAYAN CEMENT	121	PROGRESSIVE IMPACT CORP BHD

82	LAND & GENERAL BHD	122	PROLEXUS BERHAD
83	LANDMARKS BHD	123	PROTASCO BHD
84	LATEXX PARTNERS BHD	124	PUBLIC PACKAGES HOLDINGS BHD
85	LII HEN INDUSTRIES	125	RAPID SYNERGY BHD
86	LTKM BHD	126	RCE CAPITAL BHD
87	MAH SING GROUP BHD	127	ROCK CHEMICAL INDUSTRIES (M) BHD
88	MALAYAN FLOUR MILLS BHD	128	SAAG CONSOLIDATED BHD
89	MALAYSIAN RESOURCES CORP BERHAD	129	SALCON BHD
90	MALPAC HOLDINGS BHD	130	SBC CORP BHD
91	MAXBIZ CORPORATION BHD	131	SCOMI MARINE BHD
92	MIECO CHIPBOARD BERHAD	132	SMPC CORPORATION BHD
93	MITRAJAYA HOLDINGS BERHAD	133	SUCCESS TRANSFORMER CORP BHD
94	MMC CORP BHD	134	SUNGEI BAGAN RUBBER COMPANY BHD
95	MTD ACPI ENGINEERING	135	SURIA CAPITAL HOLDINGS BHD
96	MUDAJAYA GROUP BERHAD	136	SYF RESOURCES BHD
97	MUI PROPERTIES BHD	137	SYMPHONY HOUSE BHD
98	MULPHA LAND BHD	138	TEBRAU TEGUH BHD
99	MYCRON STEEL BHD	139	TECK GUAN PERDANA BHD
100	NAIM HOLDINGS BERHAD	140	TEK SENG HLDGS BHD
101	NPC RESOURCES BHD	141	TOMYPAK HOLDINGS BHD
102	NTPM HOLDINGS BHD	142	TONG HERR RESOURCES BHD
103	ORIENTAL INTEREST BHD	143	TOYO INK GROUP BHD
104	ORNAPAPER BHD	144	TRC SYNERGY BERHAD
105	P.I.E. INDUSTRIAL BHD	145	TSM GLOBAL BHD
106	PADINI HOLDINGS BHD	146	UAC BERHAD
107	PAN MALAYSIA CORP BHD	147	UMS HOLDINGS BHD
108	PBA HOLDING BHD	148	UNICO-DESA PLANTATION BHD
109	PERDUREN BHD	149	UNIMECH GROUP BHD
110	PJ DEVELOPMENT HLDGS	150	WAWASAN TKH HOLDINGS BHD
111	PJBUMI BHD	151	YEE LEE CORPORATION BHD
112	PLB ENGINEERING BERHAD	152	YEN GLOBAL
113	PLS PLANTATION BHD	153	YINSON HOLDINGS BHD
114	PMB TECH BHD	154	YONG TAI BHD
115	PNE PCB BHD	155	YTL POWER INTERNATIONAL BHD
116	POLY GLASS FIBRE (M)	156	ZELAN BHD